

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A coated, coextruded, biaxially stretched polyolefin film, which comprises at least one base layer B made of polyolefins and a top layer Z made of polyolefins modified using maleic acid anhydride, wherein a coating made of a primer, which forms the primer layer P, is applied to the surface of the top layer Z, and an inorganic coating made of lithium-potassium polysilicates, which forms a polysilicate layer, is applied to the surface of the primer layer P and the polyolefin film has an oxygen permeability at 23 °C and 50 % relative humidity of less than 1 cm³/m²*day*bar.
2. (Previously presented) The polyolefin film according to Claim 1, wherein the coextruded and biaxially stretched film has a further top layer on the side diametrically opposite the layer Z.
3. (Previously presented) The polyolefin film according to claim 1, wherein the polysilicate coating is applied from an aqueous solution of lithium and potassium polysilicates.
4. (Previously presented) The polyolefin film according to claim 1, wherein the polysilicate coating is a mixture of lithium and potassium polysilicates of the general formula $(\text{Li}_2\text{O})_x(\text{K}_2\text{O})_{1-x}(\text{SiO}_2)_y$, in which x is the mole fraction of Li_2O and y is the mole ratio $\text{SiO}_2:\text{K}_2\text{O}$ and $x = 0.4$ to < 1 and $y = 1 - 10$.
5. (Previously presented) The polyolefin film according to claim 1, wherein the primer layer is a layer made of PVOH.
6. (Previously presented) The polyolefin film according to claim 5, wherein the PVOH has a degree of hydrolysis of 85 to < 100 %.
7. (Previously presented) The polyolefin film according to claim 1, wherein the layer Z contains 80 to 100 weight-percent of said polyolefins and said polyolefins are a polypropylene homopolymer, propylene copolymer, or polyethylene.

8. (Previously presented) The polyolefin film according to claim 7, wherein the polypropylene homopolymer, propylene copolymer, or polyethylene grafted using maleic acid anhydride has a maleic acid anhydride content of 0.05 to 3 weight-percent in relation to the weight of the polymer.
9. (Previously presented) The polyolefin film according to claim 1, wherein the polypropylene homopolymer, propylene copolymer, or polyethylene grafted using maleic acid anhydride has a melting point of 150 to 165 °C and a Vicat softening point of 120 to 150 °C.
10. (Previously presented) The polyolefin film according to claim 1, wherein the layer Z additionally contains > 0 to 30 weight-percent non-modified olefinic polymers made of propylene, ethylene, or butene units.
11. (Previously presented) The polyolefin film according to claim 1, wherein the film has a further top layer made of sealable polyolefinic polymers on the diametrically opposite surface of the base layer.
12. (Previously presented) The polyolefin film according to claim 1, wherein the layer Z has a layer thickness of 0.3 to 3 µm.
13. (Previously presented) The polyolefin film according to claim 1, wherein first a film, which comprises at least the base layer B and the layer Z, is manufactured according to the coextrusion method, and subsequently the surface of layer Z is coated with PVOH and subsequently a polysilicate coating is applied to the PVOH coating.
14. (Previously presented) The polyolefin film according to claim 1, wherein the coextruded film has further coextruded layers and the film is a three-layered, four-layered, or five-layered basic film and the further layers are synthesized from polyolefins.
15. (Previously presented) The polyolefin film according to claim 14, wherein the coextruded film is a three-layered film having a sealable top layer on the diametrically opposite

side of the base layer, which is synthesized from propylene copolymers or propylene terpolymers.

16. (Currently Amended) The polyolefin film according to ~~claim 1~~ claim 22, wherein the polyolefin film has an oxygen permeability at 23 °C and 50 % relative humidity of less than 1 cm³/m²*day*bar.

17. (Previously presented) A laminate made of a coated polyolefin film according to claim 1, wherein the polyolefin film is laminated into a laminate with a polyethylene film using laminating adhesive, the lamination being performed against the polysilicate-coated side.

18. (Previously presented) The laminate according to Claim 17, wherein the laminate has an oxygen permeability at 23 °C and 50 % relative humidity of less than 0.5 cm³/m²*day*bar.

19. (Previously presented) The laminate according to claim 17, wherein a solvent-free laminating adhesive is used for the lamination.

20. (Previously presented) A method for manufacturing a coated film, wherein a coextruded, biaxially stretched film is manufactured which has a base layer B and a first top layer Z and a second top layer made of sealable polyolefins, the layer Z being synthesized from polyolefin grafted with maleic acid anhydride and the surface of the layer Z being provided with a PVOH coating and a polysilicate coating being applied from aqueous solution onto the surface of the PVOH coating.

21. (Previously presented) The polyolefin film according to claim 9, wherein the layer Z additionally contains > 0 to 30 weight-percent non-modified olefinic polymers made of polyethylene, polypropylene, propylene terpolymers, and propylene copolymers.

22. (New) A coated, coextruded, biaxially stretched polyolefin film, which consists essentially of at least one base layer B made of polyolefins and a top layer Z made of polyolefins modified using maleic acid anhydride, wherein a coating made of a primer, which forms the primer layer P, is applied to the surface of the top layer Z, and an inorganic coating made of

lithium-potassium polysilicates, which forms a polysilicate layer, is applied to the surface of the primer layer P.

23. (New) The polyolefin film according to Claim 22, wherein the coextruded and biaxially stretched film has a further top layer on the side diametrically opposite the layer Z and the polysilicate coating is applied from an aqueous solution of lithium and potassium polysilicates.

24. (New) The polyolefin film according to claim 23, wherein the polysilicate coating is a mixture of lithium and potassium polysilicates of the general formula $(\text{Li}_2\text{O})_x(\text{K}_2\text{O})_{1-x}(\text{SiO}_2)_y$, in which x is the mole fraction of Li_2O and y is the mole ratio $\text{SiO}_2:\text{K}_2\text{O}$ and $x = 0.4$ to < 1 and $y = 1 - 10$ and the primer layer is a layer made of PVOH which has a degree of hydrolysis of 85 to $< 100\%$.